The Meaning of Pushing Buttons:
An Exploration of Videogames as Art
and the Expression of Sprites, Cutscenes, and D-Pads

An Honors Thesis (HONRS 499)

by

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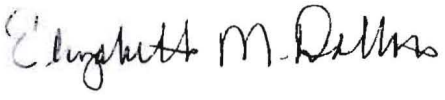

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Abstract

Videogames have been a mainstream entertainment medium since the 1970s, but some games have begun to express themselves beyond mere entertainment value. Games have always emulated visual and narrative elements similar to existing media such as film, novels, and paintings, but the interactive elements allow videogames to stand alone as an expressive medium. This paper seeks to explore the ways in which videogames can express a variety of ideas. I also wanted to explore the question: Can videogames be considered art?

Acknowledgments

I would like to thank my parents for buying the family an original Nintendo back in the late 1980s; my sister, for sharing the controllers with me and letting me "help" her play games; the countless people who pointed me to new games and articles that might fit the "videogames as art" category; Tristan Donovan for his helpful e-mails about effective videogame research; and Dr. James Ruebel for allowing me to write a thesis about videogames. Finally, thank you to my thesis advisor Beth Dalton for all her ideas, encouragement, and writing instruction, both in this thesis and my other undergraduate endeavors.

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I. Introduction

Videogames have nearly always been a part of my life. Early Christmases consisted of watching my older sister play *Super Mario Bros* (1985) on our old Nintendo Entertainment System (NES), and as I grew older, I picked up the controller myself and joined her. From running and jumping platform games on our Nintendo and Sega Genesis consoles to adventure and puzzle games on my family's PC, games allowed me to explore new worlds from my small-town home.

It wasn't until a trip to Italy when I realized how games affected the way I viewed the world. The ruins scattered around Rome strongly reminded me of Grecian ruins in a game I had often played when I was younger. I found it odd that I was comparing these thousand-years old ruins to the pixelated versions from a game that was released only fifteen years before, and that I was thinking about how the ruins resembled the game. In truth, the ruins would have undoubtedly been the game's influence, but because I had encountered the game first, it was my basis of comparison.

This experience encouraged me to look at the ways other games influenced my worldview and, later, to seek out accounts of others' similar experiences. My own reflections made me realize that many of my reactions to games were similar to those I had while reading books and watching movies. My interpretations of certain games had deepened as I grew older, and I began to understand many more cultural references and contexts that cropped up in games I had played when I was much younger.

During my time as an undergraduate, I started crafting clearer definitions of where I wanted to go in my life. Realizing that my love for learning and making use of information would fit well in the world of libraries, I decided that I would like to pursue a career in library science.

As I've learned more about working in libraries, I've realized that part of my job will include deciding what belongs in the collections I will maintain for my libraries. Essentially, I help decide what is worthy to sit on the shelves. When my hometown library sent a survey to its patrons asking their thoughts on adding popular videogames for circulation, I realized that this form of entertainment that I loved was starting to find a more mainstream audience than the negatively stereotyped "gamers" of the past.

After I acknowledged how deeply videogames had affected my life and observed that they would likely be a potentially controversial part of my future career, I decided that I wanted to explore the form in a more scholarly manner. I especially wanted to investigate their cultural worth; could videogames be considered art? Even though the general public does not consider videogames to have the qualities of art, videogames had affected me as art often affects people.

Videogames do strive for artistic expression in many ways. Visually, some games emphasize realism while others opt for more stylized imagery. Some games imitate noir films while others purposely emulate the chaos of Saturday morning cartoons. Game soundtracks range from simple monophonic 8-bit bleeps to licensed pop music to commissioned scores recorded by full symphonies. Stories can be as simple as "find and rescue the princess" or delve deeply into moral conundrums that may or may not have a right answer, following a wide range of characters and plot threads.

Videogames serve an entertainment purpose, but they also craft and create new worlds in much the same way as films and books and other forms of media. Some games dive even deeper into the worlds they create, asking difficult questions and not always providing answers. Others pay such critical attention to the details of the worlds they create that the experience becomes

less about following the rules of the game and more about exploring and existing within the environment of the game.

In their relatively short lifetime, games have advanced at an astonishingly fast pace. From *Pong*'s simple objective and graphics, game designers have developed ways of creating almost entirely interactive three-dimensional worlds and written open-ended, sometimes challenging storylines. The environments created in these games require focused attention and critical thinking to fully appreciate the game.

While games draw from other expressive mediums, where they remain unique is their unprecedented level of interactivity. A novel or painting requires a person to interact with it, but not in the same way that a game does. Novels and paintings remain unchanged from a person's interaction with them, but a person playing a game can drastically alter the game environment to suit her own tastes or interpretations of the environment. The act of decision-making can be its own form of expression, and the extent to which players can or cannot make decisions in games affects the tone of those games.

Videogames are an emerging form, approaching their 50-year anniversary after 1962's *Spacewar!* (1962) fascinated curious programmers in MIT's computer labs. Game designers are still exploring the different expressive tools available to them and figuring out what is and isn't formally distracting to their audiences (Bissell 94). However, as time progresses, more programmers are discovering what works.

The ubiquitous accessibility of the Internet has also affected the way players interact with videogames. Independent programmers are able to post and distribute their games through blogs and videogame aggregate sites. Videogames are a medium that is sometimes dependent on oftentimes expensive equipment – many games require specific consoles to play, and a player

likely cannot experience certain games if she does not have the right hardware. To combat this, many independent programmers post games directly to their websites, and the games only require free software to play. If a player wants to experience a console game she cannot purchase, she can find videos and game walkthroughs to learn about the game and experience it as much as she can through those secondary sources. Where videogames used to have a niche audience in a time when personal computers and video technology were more expensive, games in some form are now almost universally available to those who have an interest.

Videogame scholarship covers a variety of avenues. Studying the art of videogames covers the visual elements (the "sprites" – 2D pixel images used in some games), the narrative (often done partly through cinematic "cutscenes"), and the game-play mechanics (for some games, controlled through the "d-pad," or four-pointed directional pad) in games. Some games implement different elements better than others, and some games excel in all three. All these elements contribute to the artistic expression in games and affect the player's overall experience.

II. Research methods

To research the games I wrote about, I had to explore many different avenues. Because videogames are such a new form, very little scholarly research on them exists. A large amount of research is about the technical side of games rather than the aesthetic and expressive side. A growing number of videogame scholars have started publishing books and articles about the form and expression of videogames, but acquiring these materials is difficult when few libraries have access to or ownership of these journals and books, and personal purchase would have been prohibitively expensive. I decided that book-wise, I wanted to find a small number of books that would provide a broad range of information and analysis. Two books proved to be invaluable references in terms of information and analytical style – Tristan Donovan's *Replay:*

The History of Video Games and Tom Bissell's *Extra Lives: Why Video Games Matter*. Donovan's work was an excellent reference in placing games within the context of game history and Bissell's book provided useful critique of the form as it exists today.

To learn about individual games, I needed to utilize the Internet. Videogames and the Internet have a wonderful symbiotic relationship – the Internet provides an outlet for programmers and players to interact with each other and explore new games, and games support Internet service providers by encouraging people to log on and play. While I tried to play as many of the games I described, sometimes that was impossible. It would, again, be prohibitively expensive for me to purchase every console game I wanted to write about, especially if I only wanted to address one small aspect of the game. I also would not have enough time to play completely through every game – some games log upwards of sixty hours of play time, and I often tack additional hours onto that number by exploring as many nooks and crannies of the game world as possible. User-posted videos and user-written walkthroughs were helpful secondary sources when playing a game proved to be impossible. If I wanted to find analysis or metadata about a game, I read reviews and other articles hosted on game websites.

Videogame information is not yet gathered under one database, although game sites such as *IGN* (www.ign.com) and *Gametrailers* (www.gametrailers.com) gather information and produce their own analyses and compilations. The library at University of Illinois Urbana-Champaign has sponsored the Gaming Initiative and houses a game collection "to support a wide variety of campus interdisciplinary programs, scholarly research, and student needs involving videogames" (http://www.library.illinois.edu/gaming/). I stumbled upon the site while researching graduate study programs, but regrettably did not have time to fully investigate the resource while writing this paper. The University of Illinois' library is the sixth largest in the

United States (www.ala.org), which will hopefully add more credibility to the legitimacy of videogame scholarship.

Videogame citation is relatively new. To list the actual games in my "Works Cited" page, I followed an MLA format listing the game title, developer, and year of publication. My in-game image, or screenshot, citations followed this format, combining web, image, and the MLA citations:

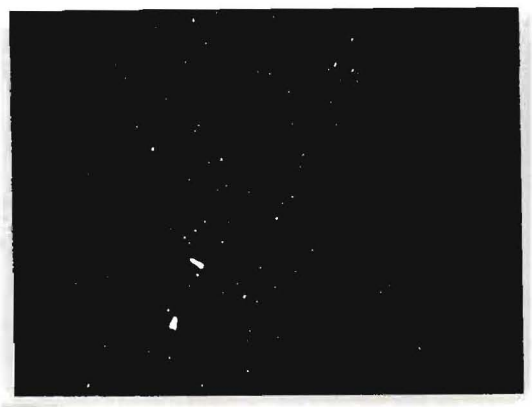
Person/company capturing image. "Image title." Type of image (*Title of game*). *Image publisher*. Date of creation/posting. Image format. Date of access (if image format is online).

I felt this format provided all the information needed for a person to find the image through an Internet search engine and still gave credit to the game from which it came.

Videogames are a fascinating subject in many disciplines. Whether economically, technologically, philosophically, or artistically, they affect the contemporary world and will likely continue to do so in the far future. Artistically, the form has experienced rapid growth and maturity since its inception in 1962. Presently, games continue to probe their boundaries and possibilities, and they will continue to grow and mature in the future. Certain aspects of games explore existing artistic ideas – visually and narratively – while experimenting with how games can stand alone as an expressive medium.

III. Graphics and Visuals

Visually, games have experienced rapid evolution since 1962's *Spacewar!* (pictured right) was realized on a car-sized PDP-1 in an MIT computer lab. While technology limitations have been a determining factor in how much programming data game designers could dedicate to graphics, the visual elements of games have always been carefully considered for their aesthetics. Even *Spacewar!* found inspiration for its basic graphics from outside sources. One ship was inspired by E.E. Smith's science fiction stories and the other by the U.S. military's Redstone Rocket (10 Donovan). Game visuals affect the tone of a game and the way the player interacts with it.

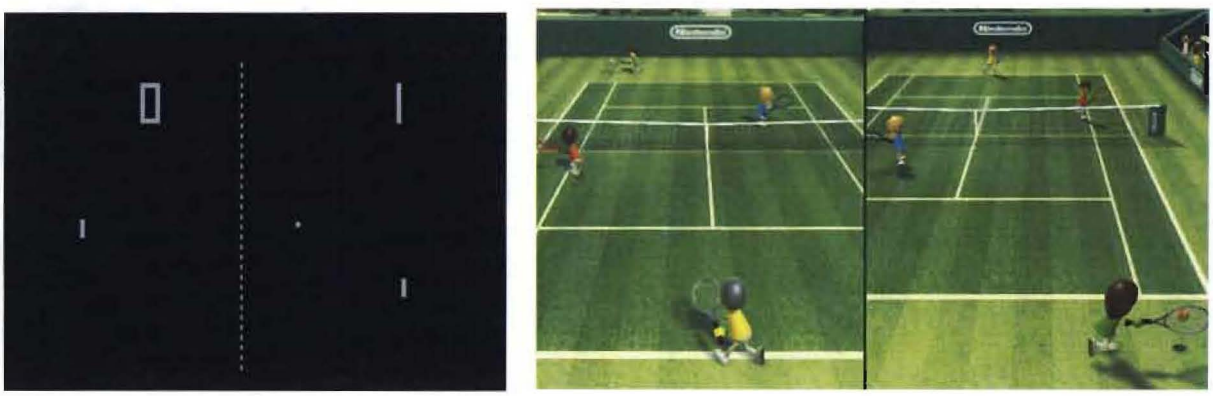


Screenshot of Spacewar! *graphics. The design of the two spaceships, in the lower left corner, shows an early concern for graphic representation in videogames.*

Pitfall! *(1982) for the Atari 2600 used bright, vibrant colors and a rainforest setting to make a simplistic jumping game visually appealing.*

Pong (1972) was an exercise in visual minimalism – the graphics consisted entirely of two white paddles, a white "ball," and white score counters set on a black background. In 2006,

Nintendo released their Wii videogame console and the game *Wii Sports* (2006) that included a tennis game. Conceptually, both *Pong* and the Wii tennis game are similar: The player tries to hit a ball past her opponent while preventing the opponent from hitting the ball past her. Visually, however, the later game for the Wii is much more complex. The two games have near-identical goals, but the programmers for *Wii Sports* decided to design and program detailed models to fit into a three-dimensional environment for their tennis game. The graphics and visual elements of games affect the types of experience players have. A game can draw attention to vast, sweeping landscapes in order to make the player feel small and insignificant or a game can de-emphasize detailed graphics when the focus is strictly on gameplay.



Pong, *on the left, has much simpler graphics than* Wii Sports' *tennis game, but both games have similar mechanics and goals.*

When playing *Pong*, the player has few visual distractions and can focus on accomplishing the game's goals. The game's representations of paddles do not look like real-world tennis racquets or ping-pong paddles, but the player does not doubt that she is playing a game based on tennis or ping-pong. An additional effect of such utilitarian graphics is that it allows the player to envision her own interpretation of the game's setting. She could envision *Pong*'s competition on a tennis court in Wimbledon or a ping-pong table in an arcade. As with a novel's text, the bare graphics of *Pong* provide the frame for a visual setting that gradually comes to life in the player's mind.

While playing *Wii Sports*' tennis, however, the player has a different experience while still playing a game with similar goals to *Pong*. In the Wii's tennis game, the graphics are more realistic and the environment resembles a real-world tennis stadium. The game's characters are avatars designed by the players, which adds an extra dimension of personal investment in the characters, and the court is flanked by stands filled with excited and cheering fans. The player has no control over the fans, but they do add to the impression that the player is participating in a professional tennis match. By providing more visual details, the game leaves less room for player interpretation. She has no doubt that she is playing a tennis-like game, and, because of its stadium location, that the game is taking place in a (theoretically) official setting. Whereas the visuals of *Pong* make the game play like a book, the visuals of *Wii Sports*' tennis game play like a movie, providing specific details about the visual setting.

The graphics in *Pong* and the tennis game in *Wii Sports* lie on opposite ends of a spectrum. On *Pong*'s side, minimal graphics put complete focus on gameplay, and on the opposite end, vibrant, detailed graphics add visual depth to simple gameplay mechanics. The more detailed the graphics and setting, the more control the programmer has over the player's experience.

A major shift in videogame visuals was that from 2D graphics to 3D. *Wolfenstein 3D* (1992) was an early, successful game in 3D, and programmers continued to use 3D graphics to make their games seem cutting edge and realistic. Games with 3D graphics attempt realism in which "real" means "the expectation that [object] behavior exists in harmony with the physics and gravity of our own world" (Johnson). 2D games can also achieve realism in this sense, but the z-axis in 3D games puts those games on a closer plane to reality.

Wolfenstein 3D *was one of the earliest 3D games.*

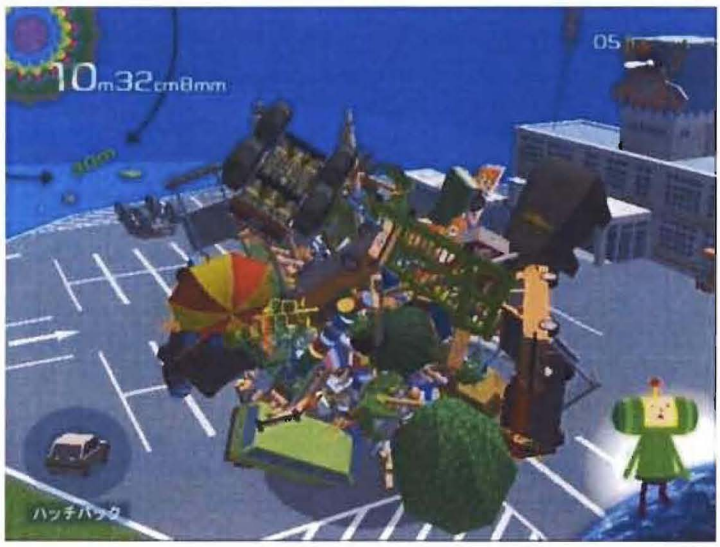
Because 2D games lack the spatial depth of 3D games, the graphics feel like flat-surface paintings or drawings; 3D games feel more like sculptures, allowing the player to explore the world from all possible angles. Neither option is technically superior, and game designers have the option of deciding which perspective is right for the games they want to make.

These screenshots from two games in the Legend of Zelda *series show two interpretations of a location called Kakariko Village. The scene on the left from* A Link to the Past *(1991) is on the Super NES console, and the scene on the right from* Ocarina of Time *is on the Nintendo 64 console.* Link to the Past *is from an earlier game system, and its graphics are 2D while the newer* Ocarina of Time *(1998) allowed players to explore a 3D world.*

As game technology has advanced to allow increasingly detailed graphics and environments, programmers have focused on two broad categories of visual components – physics and aesthetics. The physics of a game focus on how well in-game elements mirror their real-world counterparts – water ripples realistically, light reflects accurately, and faces and bodies move naturally. Successful game aesthetics emphasize setting and style – games set in specific years use period-appropriate props and costumes, game environments are visually engaging, and players are more willing to suspend disbelief if designers choose to be aesthetically creative.

Flower *(2009) for PlayStation 3 was a formidable task of both physics and aesthetics – the game took place in open, windy fields of grass, and the goal of the game was to return life and beauty to those fields. The realism of the wind and sunlight playing on each individual blade of grass added to the aesthetic appeal as the player directs a current of floating flower petals through verdant landscapes.*

Game designers often forego visual realism to explore different expressive styles in the game's appearance. Sometimes this means placing realistic characters in fantastic worlds, and other times it means completely reimagining game worlds to fit a specific schema as seen in the following images:



Games in the Katamari *series (2004) take place in levels that resemble modern day Western cities, but the series' premise has no basis in the real world. The main character, a small cartoonish being (seen at the bottom right of this screenshot) uses a small ball that he rolls around the level to collect increasingly larger objects until the ball is big enough to become a "star." Bright, colorful visuals fit the game's cartoonish premise and allowed the game designers to play with different visual interpretations of everyday objects.*

Psychonauts *(2005) follows the main character's excursions into worlds generated by other game characters' minds. Visually, the characters themselves are human caricatures, maintaining some degree of realism, but the worlds that the main character explores bear little resemblance to reality.*

Kirby's Epic Yarn *(2010) takes a cartoonish character (the titular character is a pink, spherical creature with red shoes and the ability to inhale its enemies whole) and places it in a universe constructed entirely of fabric. The game's soft textures fit its gentle design and simple challenges, and it offers a unique visual experience that takes the game beyond its basic platforming genre. The programmers even incorporated cloth into the gameplay mechanics, allowing Kirby to "fold" and "stitch" different parts of the background and game world.*

The Super NES's Donkey Kong Country *(1994) was a 2D game that experimented with adding 3D depth to the screen, and its lush colors and various locales made the game series visually ambitious for the three-year old, 16-bit console.*

Clockwise from top left: Screenshot from Okami, *folding screen* titled Horse-breaking *by Tosa Mitsumochi, hanging scroll titled* White Herons *by Maruyama Ōkyo. These images compare the visual aesthetic of* Okami *with culturally significant painting styles from Japan. Compare the red stamp on the left side of the screen in* Okami *with the red stamp in the bottom right corner of* Herons.

Okami (2006) follows the journey of the white wolf Amaterasu, named for the Shinto sun goddess. The game draws on Japanese mythology and folklore, and its visual style emulates Japanese *sumi-e* brush paintings. In fact, one important gameplay element is the Celestial Brush, a paintbrush the main character uses to "paint" spells that affect the environment. Playing the game is like playing a moving painting or picture book, which adds to the epic tone of the game. *Okami* used a pre-existing art technique that was culturally significant while still maintaining an interesting gameplay experience. Games can visually emulate existing styles, and, in the case of *Okami*, incorporate them into the game mechanics (Japan Media Arts Plaza).

Games can also use their settings to deepen the play experience. *Fallout 3* (2008) creates an immersive and complete world through its visual elements. The game is set in the Wasteland of Washington D.C. in 2277, two-hundred years after a nuclear war between the United States and China that destroyed much of the world. The game explores an alternate history following World War II, in which China and the United States emerged as world superpowers and much of the culture of the 1950's lingered into the 21st century.

As the player explores the Wasteland of D.C., she finds remnants of the past that survived time and the initial nuclear blasts. Tattered posters paper the walls of shattered buildings, and the sharkfins of ruined cars poke out of piles of rubble. Certain elements of the game seem drawn directly from B-level science fiction movies, such as the sentry robots that roam abandoned factories. What is especially troubling about these nostalgic visual components is the juxtaposition to the obvious catastrophe that froze the world in the game developers' vision of 2077.

A Protectron robot from Fallout 3 *compared to a robot from the 1956 movie* Forbidden Planet.

Fallout 3 was an ambitious project, setting out to recreate (and destroy) an entire, recognizable city. As the player explores the game world, she will eventually face images of familiar landmarks decimated by bomb blasts and neglect. Seeing the crumbling sides of the Washington Monument or the massive hole in the dome of the Capitol Building can be disconcerting, but placing these images in a videogame allows the player to discover these ruins at her own pace. She may avoid exploring portions of the city to postpone the inevitable discovery of a ruined stronghold, or she may be surprised by a distant glimpse of a familiar landmark.

Exploring the buildings in the game creates an even more complex and troubling world. Early in the game, the player has the opportunity to investigate a school that has been taken over by a group of Raiders, roving bandits that constantly heckle the main player. The marquee in front of the building still has letters in place: "Nov 22 – Early dismissal; Nov 23-24 No School." This element has an even stronger impact when placed in the context of the game world in which the catastrophic nuclear war took place on October 23, 2077. Inside the school, the player finds cheerful propaganda posters on blood-spattered walls and shelves of toys next to skeletons and severed limbs.

By creating a culturally lethargic timeline in which the 1950's aesthetic bleeds into every facet of the setting, the game developers make a point about the comfortable and fragile idea of nostalgia. Had *Fallout 3* taken place in a modern day post-nuclear war environment, the impact would have been different. Players may have been similarly shocked, but it would have been on the singular level of shock at seeing any sort of massive destruction. By placing the game in an nostalgic vision of 1950's America, which many players have not experienced first-hand, it adds the impact of destroying an idyllic history. It reminds people of the tenuous hold on peace that the world had during the Cold War – had one politically charged situation tipped slightly in another direction, the world could have found itself in a nuclear war that resulted in the bleak wastelands found in *Fallout 3*. The in-game posters that encourage trust in the existing institutions seem foolish as one looks out the window to see a crumbling Capitol Building.

An aerial view of the game world in Fallout 3*'s Washington D.C.*

Fallout 3 is an example of how a carefully planned setting can separate a game from others in its genre. *Fallout 3* is a shooting game in first-person perspective (first-person shooter, or FPS), a genre that has become extremely popular in recent years. In 2010, three of the top ten best-selling games were first-person shooters (Zoss). However, the visual satire in *Fallout 3* adds

an extra dimension of humor and intrigue that makes it more than just a run-and-gun game. The setting tells its own story beyond what the player finds out from cinematic scenes and conversations with other characters in the game, and the lack of explicitly stated details leaves room for the player to infer prior events. *Fallout 3* makes statements about melodramatic nostalgia, the totality of thermonuclear war, and the selfishness of people under duress (outside the first fallout shelter Vault door, the player finds skeletons next to picket signs that read "Help us!" and "We're dying, assholes"), but the game allows the player to discover and decipher those statements for herself through the clues sprinkled throughout the game world.

Game visuals offer programmers infinite avenues of expression. The style of images used can affect the tone of a game and alter the player's experience, or the aesthetics of the game's setting can serve as part of the narrative of a game.

IV. Narrative and Storytelling

Storytelling has, in some way, always been a part of videogames. Adventure games and role-playing games (RPGs) are the genres that best lend themselves to narrative in games because they usually have recognizable protagonists and antagonists and sources of conflict that needs resolution. Text-based adventures, such as *Zork! - The Great Underground Empire - Part 1* (1980), were PC games developed in the 1980s that relied entirely on text to generate the game environment and describe characters' actions. Early graphical PC games, like LucasArts' point-and-click adventure games, mixed text and graphics to create games that played like interactive storybooks.

Because contemporary games often use more advanced technology and can refer to a growing library of videogame history, they employ storytelling by other means. A common practice is to provide exposition through cutscenes – in-game, cinematic scenes in which the

player has little or no control over the action on the screen. Cutscenes are a rather overt means of narrative in videogames, but many games use more indirect and subtle methods to develop their worlds, stories, and characters.

The growing interactivity and non-linearity of game plots has allowed developers to provide more subtle means of telling stories and refining characters. In *Fallout 3*, various set pieces and character interactions reveal details about the world's history. *Portal* (2007) is a game with an unreliable character, forcing the player to question the game as the story unfolds. *Mass Effect* (2008) is an RPG that uses a complex dialogue system and massive script to control character conversations and further immerse the player in the game. While new games explore what are currently innovative methods of storytelling, they are simply another narrative development that has emerged in videogames.

Text-adventure games in the 1980s were entirely narrative. These games were text-only, and players interacted with the world by typing simple commands such as "look around," "get flask," or "open window." *Zork!*, one of the earliest text-adventure games, is simply white text on a black screen. The game opens with a four-line title/copyright statement and a three-line description of the player's starting location. From that point, the player needs to type commands to learn about the game world.

Because text-adventures relied on narrative, they needed to have descriptive and interesting writing. *Zork!*'s writing was slightly tongue-in-cheek while still clearly communicating the game's intentions. In some cases, the player could ask the game questions and learn more about the game world. One of the first encounters with a grue, an enemy in *Zork!*, happens after the player walks up the stairs of the first house she enters: "You have moved into a dark place. It is pitch black. You are likely to be eaten by a grue." After typing "what is a grue," the

player learns that, "The grue is a sinister, lurking presence in the dark places of the earth. Its favorite diet is adventurers, but its insatiable appetite is tempered by its fear of light. No grue has ever been seen by the light of day, and few have survived its fearsome jaws to tell the tale" (*Zork!*). The game does not explicitly state what the grue looks like or what it does, but it provides enough information for the player to supply details based on her own experiences with sinister, lurking, grue-like creatures. Text-adventure games are like interactive novels, requiring player interaction beyond the act of pushing buttons to manipulate a graphic world. To fully experience a text-adventure, players need to actively envision the environment, and, as with a book, every player's vision of *Zork!* is different.

As technology became more powerful, PC adventure games could use more graphics, which affected game narrative. While text-adventures allowed the player to imagine her own version of the game world, graphics allowed programmers to exercise more control over the player's experience by creating the specific images they wanted the players to see. Point-and-click adventure games explored different methods of storytelling while still allowing the player a high level of game interaction. Most of the screen is usually a large graphic, and there may be a dedicated control interface at one side of the screen. These games used the computer mouse as the primary means of interaction. In text-adventures like *Zork!*, the player typed "open door," but in point-and-click adventures, the player either clicked a command "open" and the image of the door she wanted to open or just clicked the door. These games were usually puzzle-based, and completing certain puzzles would advance the plot. Because graphics were still pixelated and not especially detailed, these text-based object descriptions still provided critical information and allowed game writers additional outlets for creativity.

Screenshot from the LucasArts game The Secret of Monkey Island *(1990). The top part of the screen is the main area where the action takes place. The bottom section is divided in two – the left side has action commands and the right side is the character's inventory.* Monkey Island*'s screwball humor added additional challenge and entertainment to the game. Here, the main character visits a used boat shot complete with a "Grog" vending machine.*

LucasArts game company, founded by *Star Wars* director George Lucas, released a number of now iconic point-and-click adventure games in the late 1980s and 1990s. LucasArts games were often full of screwball humor that made the puzzles less intuitive and required more creative thinking from the player. In the *Monkey Island* game series (1990), players took the role of Guybrush Threepwood, an aspiring pirate who was clueless about pirating and dealing with people in everyday social situations. *Day of the Tentacle* (1993) emulated elements of 1950's science fiction B-movies and followed three characters sent to three different time periods after an unfortunate accident with a mad scientist's time-traveling Chron-o-Johns. *Indiana Jones and the Fate of Atlantis* (1992), based on the movie series of the same character, did not have the same screwball humor as other LucasArts games, but it had the same mix of dark humor and action on an epic scale as the movies on which it was based.

LucasArts games are memorable for both their ingenuity in videogame storytelling and for the actual content of their games. The games struck an appropriate balance between gameplay and cutscenes that gave the player control of the game the majority of the time while

still providing enough cutscene breaks for plot exposition. This was not a new formula, but LucasArts filled the cutscenes with humor and characters not typical of run-and-gun action games. In *Day of the Tentacle*'s bizarre time travel scene, flighty med student Laverne states, "This must be that Woodstock place Mom and Dad are always talking about." These games were like interactive picture books that required the player to solve puzzles to find out what would happen on the next page, but exploring the game world while solving those puzzles was where the majority of character and setting development took place. The sheer range of story genres that LucasArts explored – screwball to adventure to fantasy to science fiction – showed that videogames could emulate film and novel styles while still maintaining their own expressive identity.

Newer games, drawing on a growing history of videogames, have more sources of videogame storytelling from which they can draw. With 3D environments and more powerful technology that allows games to hold more information, the ways in which players interact with games are different than they were when games first started exploring the realm of interactive storytelling. Rather than relying on text, newer games can use voice-acting for player conversations. Because cutscenes in newer games take place in 3D space, they have taken on an even more cinematic feel as programmers draw on film-editing techniques when laying out these scenes. Some games also include cutscenes in which the player can move her character around the game environment while the scene takes place around the character. This provides a higher degree of interactivity and realism, but players can sometimes miss crucial information if they are looking in the wrong direction. Newer games have also taken on less linear plots or incorporated more optional side stories for players to explore, allowing them to design their own stories within the games' prescribed worlds.

Fallout 3 is a game set on a massive narrative scale. It takes place in the Wasteland of a Washington D.C. destroyed by nuclear war, and the player learns about the world by interacting with the characters and locations she encounters. While the game has the central plotline of the main character escaping relative safety in a literal underground community to find her father in the Wasteland, the player can also explore myriad side stories that allow her to further define her character/avatar. The game world has complex networks of slave traders, bandits, mercenaries, remnant government entities, merchants, and settlements. These networks allow the player to characterize her avatar as a benevolent guardian and rescuer, scavenger and trader, thief, bloodthirsty cannibal, or neutral survivor. Game events allow for seemingly infinite character paths, depending on how the player chooses to use her avatar. *Fallout 3* does not entirely depend on dialogue – of which a fair amount is rather stilted – for plot development. However, where the dialogue fails, the immensity of the game universe offers numerous avenues of player-directed storytelling that create unique experiences for each player. Even players who follow similar avenues with their respective avatars will have different motivations for their in-game actions, allowing each player to create a unique story centered on the frame of the world created in *Fallout 3*.

While games similar to *Fallout 3* utilize environmental narrative, other games use particularly well-crafted characters to advance the plot. *Portal* is a relatively brief, straightforward game. The visual elements are not particularly noteworthy except for the realistic graphics. The audio elements in the game support the visuals, but are not particularly memorable either. Where *Portal* stands out is in the gradual exposition of the character's true situation through the course of the game.

Portal starts out as a simple puzzle game. The main character begins in a research facility testing room and follows the instructions of the lab's artificial intelligence (AI), GLaDOS. Gradually, the character learns how to control the guns that create "portals," holes in space that allow the player to travel from portal to portal and solve the puzzles that have locked the exit in each room. After the initial exposition, the player expects to complete a set of increasingly difficult puzzles until she finally leaves the in-game lab and wins the game. The puzzle game is a common genre and the player probably does not expect too many surprises as she plays. However, the character of GLaDOS soon changes the player's perceptions of the game.

At first, the player trusts GLaDOS since it is simply the in-game instructor. In-game instruction is a fairly standard element in many games and usually fades into the background as the player becomes more skilled and comfortable with the game. When GLaDOS begins to lie to the character, however, the player suddenly cannot trust what she assumed to simply be an in-game mechanism. Jarringly, GLaDOS ceases to be a mildly annoying background presence and instead becomes a potentially deadly adversary. GLaDOS becomes increasingly untrustworthy, telling lies about the rooms' puzzles and later, blatantly trying to murder the main character. The whole time, GLaDOS asserts that its lies and mistruths are all part of the testing facility programming – "Any appearance of danger is merely a device to enhance your testing experience" (*Portal*).

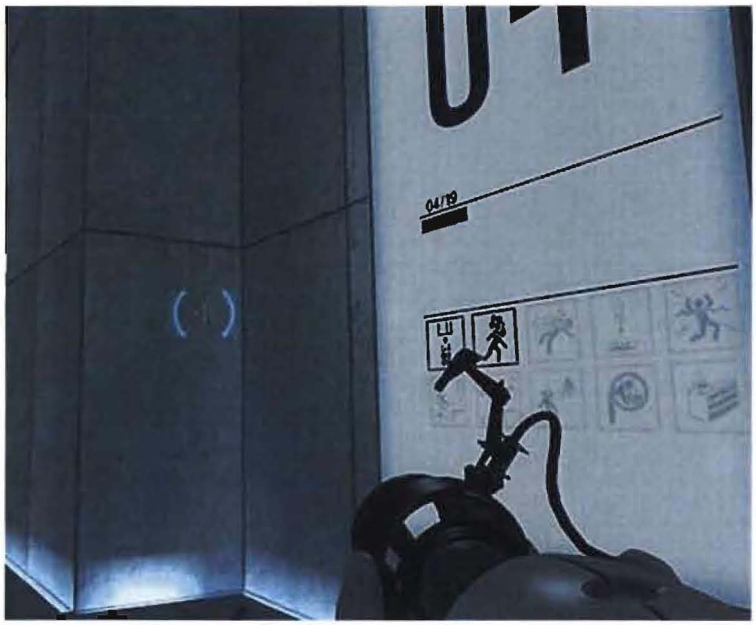
As the character and player realize that they are not simply solving puzzles but surviving against the in-game AI, they begin to question all past elements in the game. Eventually, the character escapes the sequence of testing rooms and is in the research facility proper. All the scientists and staff are gone (the neglected and chaotic state of the facility indicate they have

been killed), and, because she cannot trust GLaDOS, the player pieces together what happened through hastily scrawled messages and other clues left on the walls.

As with other unreliable narrators in literature and film, GLaDOS does its best to convince the player of the verity of its statements even while it is trying to trick the player. Humbert Humbert from Vladimir Nabokov's *Lolita* uses wit and assertions of his superior intellect to endear himself to the reader and encourage her compliance even as he writes about his terrible crimes. Similarly, GLaDOS is, at the beginning, witty and clever and endears itself to the player, and its authoritative position as a test administrator implies that the character and player should trust what it says. Because GLaDOS is in a position of some power, the player trusts it. The Narrator, who is the nameless protagonist in David Fincher's *Fight Club*, however, uses his lack of distinction to encourage the viewer to trust and relate to him. He seems like an average everyman, so the ending revelation of his double life immediately forces the viewer to look past everything he previously said and did in the movie to find clues that point to the truth (Fincher). Because GLaDOS, an in-game instructor, at first seems like a standard game mechanic, the player has little reason to doubt what it tells her. After the first incident when GLaDOS gives the character false information, it tells the character "As part of a required test protocol, we will stop enhancing the truth..." but several lies later, the player starts to wonder how many other times GLaDOS will "enhance" the truth and begins to question its instructions.

What is especially interesting about *Portal* is the way in which the true nature of the game gradually unfolds as the player explores each room and interacts with the antagonist GLaDOS. The character of GLaDOS drives the story forward and creates true tension as the player realizes that she has been following an unreliable narrator. One of the most quoted –and funniest – moments in the game happens when the player, who has heard GLaDOS's repeated promises of

cake at the end of the experiment, escapes the testing rooms and finds the painted message "The cake is a lie" scribbled repeatedly on the facility's walls. It is a further example of GLaDOS's unreliability and also of how game developers can insert small details to drive the story without using cutscene exposition. The player and character may have been hopeful about the prospect of cake (a pleasant ending) after escaping the lab, but when the player sees "The cake is a lie" hastily written by human hands, she no longer doubts GLaDOS's true intentions. *Portal* is a game with a straightforward premise but an extremely layered story, leading the player to question what is actually real in the game and actively involve herself in the game's events to discover the truth.



Each new room in Portal *has a panel with different icons illustrating the potential dangers in that room. The bottom right icon shows cake, but it is not highlighted.*

Mass Effect is a game that crafts an expansive story revealed through well-crafted dialogue and a well-done, interactive script. It is an RPG by game company BioWare that places the main character Commander Shepard on a ship exploring the galaxy just as humanity has begun to interact with extraterrestrial beings. Commander Shepard is a player avatar in the true sense of the word as players choose Shepard's gender and design his/her appearance.

Throughout the game, the player makes many moral choices that have long-lasting effects in the game, further developing her Commander Shepard into the character she wants him/her to be.

Mass Effect uses a unique and extremely deep dialogue system that engages the player and keeps track of myriad conversation threads. BioWare employs at least twenty writers between its two main offices, which means that game writing goes through rigorous quality control. For *Mass Effect*, this resulted in a script containing 300,000 words (Bissell 111). Conceivably, the player will not experience all of that script as she cannot choose every dialogue option during a single play-through of the game. However, the benefit of having such a massive script is that conversations have room to be more realistic. *Mass Effect*'s way of handling these character interactions is to offer the player basic dialogue options that give the general idea of the statement and its tone. The spoken dialogue is worded differently, but it fits the player's choice. In one conversation, choosing the dialogue option "Sounds boring" actually causes Shepard to say "That doesn't sound very interesting" (*Mass Effect*). The game keeps track of how the player responds to different situations, defining the character's morality by the character's conversations and actions. *Mass Effect*'s designers took on the enormous task of fully exploring how games could allow deeper player-determined character development and true interactive storytelling. The different threads that branch out from each decision the player makes in the game always converge at several main plot points, but *Mass Effect*'s ambitious effort still allows a large amount of deviation from the main plot. BioWare even programmed the next installment of the series, *Mass Effect 2*, to begin differently each time based on the decisions the player made in the first *Mass Effect*. This means that if a character died in the first game, that character will not appear in the second game, granting a level of continuity difficult to achieve in non-linear and interactive storytelling (www.bioware.com).

Storytelling in games is sometimes problematic given the nature of the medium. Perhaps the most defining trait of videogames is their level of interactivity. Players must actively interact with the game in order for it to work and actually be called a game, but the very core of storytelling is that its participants are passive. A film or book tells the story and viewers or readers take in what they are given. Readers and viewers interact with books and movies by thinking about what they have seen and reacting to it, but they cannot change the text or frames of books or movies without creating an entirely new entity. Videogame interactivity is different in that the player can directly manipulate the environment and should theoretically be able to change the direction of the plot. However, given the myriad possibilities that one simple action could potentially have if game worlds operated exactly like the real world, programmers generally use a single overarching plot from which the player cannot truly deviate. Ultimately, trying to traditionally tell stories through videogames could prevent them from further exploring how they can use the mechanics and nature of the medium to create thought provoking games that go beyond simple plot exposition into true character development and consequence exploration. Different games have experimented with different components of what it might take to truly establish the medium as a narrative form, but right now, most games are still trying to find the proper balance of narrative with gameplay.

V. Art/Indie Videogames

Washington Post writer Mike Musgrove invited Michael Dirda, Pulitzer-prize winning author and journalist, to play the videogame *BioShock* (2007). Musgrove selected that particular game for Dirda to play because of its critical acclaim and complex thematic elements – the world created in *BioShock* drew heavily from and criticizes Ayn Rand's philosophies outlined in *Atlas Shrugged*. Dirda enjoyed the game but hesitated to call it art. "'When there's a videogame that makes the player depressed, that's when the medium might be onto something as an art form,'

Dirda said. 'It's easy to like something that makes you feel powerful in its fantasy world, as games generally do. But would anybody play a game that makes him sad?'" (Musgrove).

While art does not always need to be sad (in fact, art can be quite fun), videogames' origins in toy aisles lead people to infer that all games are strictly entertainment. That perception can minimize the other expressive avenues that some programmers take when designing their games. Many programmers intend for their games to function as art first, and the level of "entertainment" is determined individually by the player. Viewing videogames strictly as a "fun" medium places it on one end of the spectrum, and until that perception is gone, programmers who want their games to be taken seriously as art may need to take a more serious tone to attract attention.

Independent programmers take advantage of the Internet to distribute their games to the public, oftentimes charging little to nothing or asking for donations in support of their games. These programmers have the option of exploring more expressive avenues and crafting what can be considered "art games" (sometimes called "indie games" – calling a game "indie" ties it to the art game genre, while "independent" just means that a programmer released the game outside of a major game developing studio). Games are made available either through programmers' independent blogs or through aggregate online game sites. Some sites like *Kongregate* (www.kongregate.com) or *Armor Games* (www.armorgames.com) offer a wide variety of independent games, but do not stick to the art games genre. Other aggregate sites like *Molleindustria* (www.molleindustria.org) or IndieGames (www.indiegames.com) generally present only art games. This widespread availability, usually requiring only an Internet connection and free-to-download software offers an unprecedented accessibility to games. In the past, people interested in videogames needed to buy a console or computer and then buy the games and appropriate hardware to play them. Many games still require this level of financial

dedication, but the Internet has indirectly made even these games less expensive, making used games and consoles easier to find, sell, and purchase.

Games freely available on the Internet are sometimes called "casual games" because they require less time investment and a shorter learning curve than many computer and videogames. Games like *Fallout 3* require many hours of gameplay and conscientious character management – the player needs to keep track of the condition of her character's equipment, monitor the character's level of radiation poisoning, follow the in-game clock, and remember where the character is on an expansive game map. Casual games generally use fewer buttons and have few and simple rules. Many art games fit into the casual games category. Art game programmers keep game controls simple, and this prevents distraction from the gameplay and expressive elements of the game.

Because the word "game" implies rules, goals, beginnings and endings, and amusement, aesthetic appeal and art do not usually appear on the list of characteristics. The parameters of early videogames were very utilitarian and strictly outlined how the games were meant to be played. A player started the game at the beginning, played according to a strictly arranged set of rules, and eventually reached some sort of ending.

The beginning of a game typically meant that the computer-controlled AI moved at its slowest setting, allowing the player to learn the controls and rules of the game. How far the player progressed into the game depended solely on the player's skill and understanding of the game's mechanics. The player reached a conclusion either by completing every programmed goal in the game or failing to complete the proper number of goals. Many of these games attached points to in-game objectives, and a player judged his skill by how many points he could acquire in a single play session. The "fun" of these games was usually tied to achieving high scores and

attempting to beat other players' high scores. Simplistic gameplay prevented deviation from the formally stated goals and "fun" of the game.

In-game objectives in earlier titles were often straightforward (use the ship to destroy all the creatures on the screen for instance) and there was usually just one way to accomplish this goal (avoid the creatures by moving the ship with these buttons and destroy the creatures with this button). Cost and limited computer storage space prevented programmers from developing games that could deviate from this tightly linear design (players couldn't move the ship away from the creatures and explore the surrounding, off-screen environment).

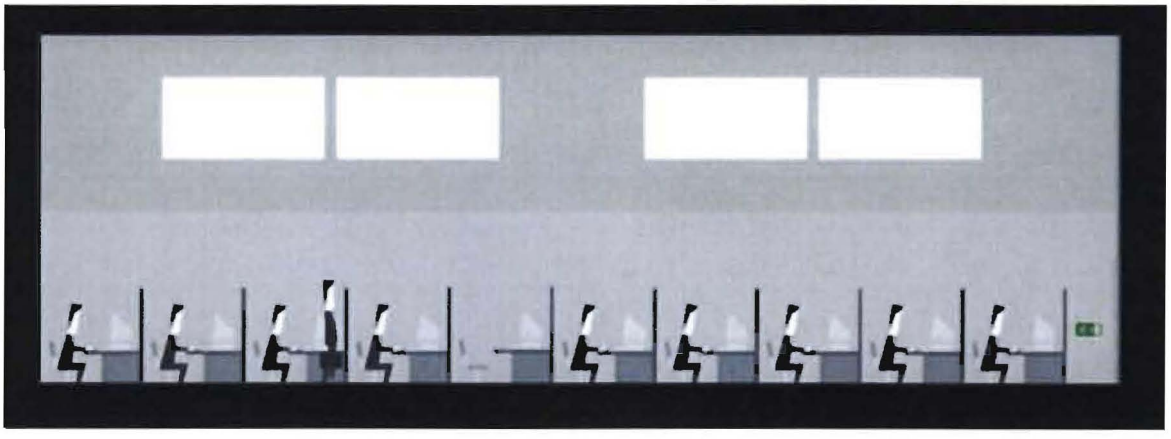
The contemporary version of goals in videogames is much more fluid than it was in the past. This is due in part to the evolution of the form and due in part to better technology. Computer storage has exponentially increased in size, and game developers have happily utilized these advances in their games. Since games can contain more programmed information, many game producers include deeper worlds open for exploration and numerous side tasks that may have little or nothing to do with completing the main goal of the game.

While games often contain multiple goals and tasks that the player can ignore and still complete the game, games still tend to have a fairly linear set of objectives. The means a player uses to accomplish those tasks may differ, but ultimately, the game has the same objective for all players. In *Fallout 3*, each player follows the main plot of searching for the main character's father, fighting against a corrupt government trying to gain power in the post-apocalyptic world, and choosing whether to repair the water purifier in the Potomac River. The paths that different players take to get through those main goals depend on how they choose to play the game, but ultimately, every player reaches the same milestones in the game. In the end, the game leaves little room for interpreting the ending, and each player has a similar experience with what

happens on screen in the game. Player interpretation of in-game events, of course, differs among all players, but *Fallout 3*'s end goal is not an ambiguous ending open to interpretation and discussion.

In contrast, *Every Day the Same Dream* (2009), by Paolo Pedercini, has a loose definition of goals. Pedercini chose to design a visually simple game to convey complex ideas, calling it "A short existential game about alienation and refusal of labor" (www.molleindustria.org). The game has specific objectives, but the game is less about completion and more about an individual's interpretation of each task.

At first, the game, appears pedestrian – the main character wakes up, goes through his day at work, and then starts over again the next morning. Even the visuals are muted, the grayscale palette broken only by the occasional accent of color. The music, a blues/rock guitar mix that loops continuously until the final scene, is perhaps the most exciting part of the game. The energetic music and drab color scheme are in opposition to each other, but the music seems to hint at a side of the main character that he wants to explore but cannot because of his life.



The main character from Every Day the Same Dream *(standing on the left) loses himself in a sea of identical cubicle workers. The green exit sign on the right emphasizes the character's desire to escape.*

After the player navigates the main character through his morning chores, the character encounters a woman in the elevator who tells him "In five more steps you will be a new person"

(*Every Day the Same Dream*). The cryptic statement means that he has five opportunities to break out of his daily cycle and become a different person. Once he finds and takes those opportunities – skipping work to spend the day in a quiet, peaceful cemetery, appreciating the beauty of a falling leaf, abandoning his car by the road to visit a cow in a field, going to work without a tie or any other clothes, and walking past his cubicle to jump off the building – the game shows an ending scene. However, the end is less about celebrating the game's completion and more about giving the player difficult ideas to ponder about the meanings behind each task and the game as a whole. An ending in which the main player wanders through his daily tasks in a world devoid of people before seeing his doppelgänger jump off a balcony is not a congratulatory ending. It certainly offers a conclusion to the moral of Pedercini's game but not closure.

Pedercini crafted a tightly scripted game with five specific objectives for each player to accomplish, but those objectives open many possible avenues of discussion. What is the significance of a cemetery visit changing the main character's worldview? Why does nature play such a significant role in Pedercini's vision of personal growth? What does the game say about contemporary work environments? What is Pedercini trying to say about suicide? The game's tasks are simple, but their implications are not.

Every Day the Same Dream is a videogame with specific goals, but it makes use of those goals to communicate its ideas and express complex themes. Roger Ebert, in an essay describing why he believes videogames can never be art, writes, "One obvious difference between art and games is that you can win a game. It has rules, points, objectives, and an outcome" (11). Pedercini's game certainly has rules, points, objectives, and outcomes, but whether the player "wins" is debatable. Because the game has tasks, the player interacts with those goals and must make decisions. The interactivity of the game is one of the key components of what Pedercini

wanted to say – it emphasizes the idea that people have choices and must make decisions in order to move forward (if they player ignores the five game objectives, the main character will cycle through workday after workday indefinitely).

Pedercini's game makes the player sad. Dirda's observation that videogames often make the main character somehow more powerful than his surroundings does not hold up to this game. One theme of *Every Day the Same Dream* is the futility of trying to change the daily work grind through conventional methods, and the ways in which the main player finally exerts power over his routine are gentle and passive. The faceless characters allow the player to easily project herself in any character's position and makes the game more powerful when the player realizes how the bleak nature of the game could apply to the real world. *Every Day the Same Dream* is a strong example of a true art game, standing up to two common criticisms for why games cannot be art.

Game programmers can work on a variety of game genres, but coding is not a skill completely governed by rules. Programmers have different ways of approaching problems in their games, and they craft game aesthetics differently. One such programmer, Gregory Weir, maintains a blog called *Ludus Novus*, describing it as "a podcast and accompanying blog about the evolving art of interaction" (Weir, *Ludus Novus*). Weir's games often have similar themes running through them – exploring the lines between dreams and reality, questioning established norms, discovering what motivates individuals – while continuously developing his own distinct aesthetic style. Some of his games are more overtly thought provoking and others arcade-like and reflex-oriented, but Weir's central thesis is "explor[ing] how we can take interactive art beyond just empty entertainment" (Weir, *Ludus Novus*). Much as a skilled film *auteur*, Weir demonstrates a solid understanding of his chosen form of expression to explore complex themes

while manipulating the player's experience so she understands exactly what he is trying to communicate.

Weir's games span a variety of genres, often pulling common gameplay elements from specifically delineated genres and piecing them into a single game. Two games in particular showcase Weir's narrative, aesthetic, and thematic style. The top-down perspective game *The Day* (2010) contains two drastically different types of games and forces the player to choose between their disparate goals, and *The Majesty of Colors* (2008) is an arcade-style game that unfolds as a brief interactive narrative. Both games explore the ideas of motivation and questioning reality while crafting deep worlds and characters in a short amount of time.

The Day is a game that Weir describes as "an exploration in decoupling videogame goals" (Weir, Developer's Notes 1). He uses the word orthogonal while describing the game's goals, meaning that they lie perpendicular to each other. Both goals are equally important, both provide – hopefully – satisfying game experiences, and neither goal has anything to do with the other. *The Day* also explores the idea of "doing what you're told and doing what you must" (Weir, Developer's Notes 3). The main character is a little girl, Tia, who is celebrating her birthday in what looks like some sort of internment camp. Her father's present is a "battle card" that she can use to play games with the other children, and he gives her two pieces of advice – have fun playing games, and "don't go into the woods, or the guards will kill you" (*The Day*).

Tia immediately has two possible objectives placed in front of her. She can either play games with the other children as she's told or explore the woods against her father's expressed wishes. The player decides on which path she would like to direct Tia, and once she completes one path, she cannot complete the other without starting the game over. If Tia plays games with the children and defeats everyone, the game ends with her family celebrating her birthday with

cake. If Tia explores the woods, she eventually uncovers the mystery of the camp and surrounding world, which appears to have been destroyed by some sort of catastrophic event.

Genre-wise, Weir made interesting choices. Card-based videogames are an established genre, and many videogames are centered on exploration, but the two rarely intersect. The idea of a "battle-card" carrying character fighting other in-game characters is a type of game genre, but exploration is not a central theme to those games. Weir pulled the central elements of two different game genres and combined them into a single game to further his exploration of orthogonal goals – when choosing a path in the game, the player is also choosing which type of game she will play.

Weir carefully orchestrated the game's aesthetics to influence how the player interprets the game. The music he used for much of the game was a folksy banjo piece intended to evoke feelings of summer camp. However, the further Tia moves from the camp, the more distorted the music becomes until she discovers an abandoned watchtower that presumably monitored the camp. At that point, the music is no longer melodic. It simply provides ambience, layering samples of radio static and distorted vocal clips to unsettle the player (Weir, Developer's Notes 7).

For the game's graphics, Weir appropriately based the game's art on the Super NES RPG *Earthbound* (1995) (Weir, Developer's Notes 6). Both games are about children exploring the wider world without adult supervision, and both games gradually unveil darker worlds as they progress. While Tia stays in camp playing games, the childlike artwork fits the tone of the childish drama that takes place with their games. Again, however, the further Tia moves from camp, the more troubling the art style seems as the true nature of the game world becomes

apparent. When Tia discovers the long-dead body of her uncle, the visuals make the image that much more disturbing than if the game art had been more realistically rendered.

Screenshots of The Day *and* Earthbound – The Day*'s artwork is an homage to 1995's* Earthbound*, a game in which children struggle against monsters of which the adults either have no knowledge or are assisting.*

Narratively, the fiction of *The Day*'s universe gradually unfolds through indirect methods as Tia interacts with the world around her. The observant player notices cameras scattered throughout the camp, and as Tia talks to adults, the thoughtful player realizes how disconcerting the characters' comments actually are. The doctor warns Tia "Don't play too hard. We ran out of antibiotics months ago," and the gardener scolds "Don't step on the plants! If you kill a plant, you get less food. The cards the children use in their games have images of soldiers, tanks, silos, and "laser drones." Interestingly, Tia discovers a destroyed version of this last weapon if she explores the woods surrounding the camp, linking the worlds revealed through the game's orthogonal paths. If the player directs Tia to the woods surrounding the camp, she might notice that trees have overgrown much of the fence. When Tia reaches the watchtower, flickering computer monitors contain final messages that provide clues about world events. However, Weir does not explicitly state what happened, allowing the player to actively engage with the game by filling in the missing details with her own imagination.

The Day is a game in which the creator tightly controls the player's experience. While the immediate interactivity of games sets the genre apart from other mediums, the programmer controls the level of interactivity the player has with the game. Weir chose the music specifically to generate certain moods, and he did not give the player an option to "mute" the sound. In some games, players might turn the game's music off and listen to something from their own music collections while they play – this alters the game-playing experience to one the programmer may not have intended. Weir also chose the art style specifically for the game, intending to elicit nostalgic feelings of childhood, so that the impact would be stronger when the player reached the darker of the two endings. This game also offers the player few true choices. She can either enter the woods and follow a relatively straight-forward path, or she can play games against the other children, who always use the same cards and have a carefully arranged order in which she must defeat them. In fact, the only true choice the player has is at the very beginning when she decides whether to play or explore. The point of *The Day* is the specific idea that Weir is trying to communicate to the player – that is, what happens when people question what they are told to do, and what might they discover? – and he tightly controls the ways in which the player reaches those conclusions.

Another of Weir's games, *The Majesty of Colors*, explores the use of narrative in games and questions the truth of reality. The game is a straightforward point-and-click story that takes place entirely within a single scene. *Majesty* has five possible endings, but the paths the player takes to each ending are dependent on the choices she makes during the game. A major theme of the game is whether the player decides to help or harm the people she encounters in-game, but the ways in which the game plays out these scenarios is particularly striking.

Screenshots from The Majesty of Colors *showing the shift from black and white to color. The texts read: "If only I could get a closer look... if I could bring an orb closer to my eyes," and "Another vessel approached. These creatures appeared to be trying to gather fish. But their tools were woefully inadequate compared to my deft, sinuous reach" (*The Majesty of Colors).

Weir uses simple, pixelated graphics – a similar style to *The Day* – and all the action takes place in a single ocean scene. The player's character is a stationary creature at the bottom right side of the screen, and the only way that she can interact with the game world is with the creature's single tentacle. *The Majesty of Colors* at first appears minimalistic, each individual path taking only a minute or two to play, but the game has five separate endings that add depth to the experience.

The game starts with a brief narrative setting up the frame story. The main character is actually someone dreaming about living as an enormous sea creature that suddenly sees color for the first time and experiences intense curiosity about the world above the water. The player never sees the dreaming character and only encounters that character's thoughts through in-game text.

During the game, the creature encounters several people. If at any time the player directs the creature to actively kill a person, a submarine and bomber plane try to destroy the creature in retaliation. Three endings are possible from this path depending on whether the submarine or plane kills the creature or the creature destroys the two machines.

If the player directs the creature to help the people it encounters, she will eventually have the option to save a drowning infant from sharks. If the creature saves the infant, a helicopter rescues the child and a fourth, more positive ending appears. If the creature purposely drowns the infant, the submarine and plane appear, leading to one of the first three endings. However, if the sharks reach the infant, the fifth ending appears after the sharks kill the child. While the first four endings describe the creature as either a benevolent helper from the sea or a monster exerting power over weaker beings, the fifth ending's text is ambiguous, questioning whether the creature could have or should have saved the child: "The young creature was dead and I couldn't help thinking that I could have prevented it" (*The Majesty of Colors*). Figuring out how to save the infant from the sharks is not as immediately intuitive as other parts of the game, so the player may experience real feelings of helplessness after several failed attempts, questioning whether she actually can save the infant.

Each ending also inserts a bit of uncertainty about whether the main character was actually dreaming during the game. If the player is able to protect the infant at the end of the game, a helicopter takes the child to safety. As the game ends and the main character wakes up, she describes hearing a helicopter in the distance. In other endings, the character hears noises in the distance similar to the noises the creature was making at the end of her dream.

Part of what makes *The Majesty of Colors* stand out is the way in which Weir develops the game's story and character. While other games often follow strictly linear plots peppered with cinematic cutscenes to provide exposition, *Majesty* seamlessly threads exposition and action together through in-game text and branches into several paths that may or may not intersect later in the game. Weir does not describe the creature beyond its developing curiosity of the world above and lets the player's actions define the creature's motivation. The player is literally

creating the character as she plays the game, an experience possible in the interactive medium of games. While Weir offers more freedom in how the player chooses to interact with *Majesty* than *The Day*, he still ties the game together by the common theme of illusion versus reality.

The blurry line between dreams and reality in *The Majesty of Colors* interestingly mirrors the line between games and reality in the real world. As the player searches for all five endings, some of the choices she makes with the main character are somewhat blasé. The main character, believing that she is simply dreaming, drowns several people out of curiosity at what would happen. However, when she wakes up, she questions whether what she experienced may have actually been real. Similarly, the choices that people make as they play games appear to have no standing consequences in the real world, but the line between games and reality blurs if people question whether their in-game choices reflect deeper, unseen motivations in reality.

Weir's games are sometimes troubling and oftentimes thought-provoking. On the surface, his games look like other games with beginnings, endings, and stated goals, but Weir's games are less about the endings than they are about the means of reaching the endings. Weir carefully crafts the experiences of his games much as a musician or writer crafts the experience of a piece of music or a novel, and he is able to communicate abstract ideas through his games. These two games are more examples of art games in which the programmer chose to express himself through the medium of videogames. They explore the nature of delusion, the atrocities of which man is capable, and the retaliatory, fearful sides of humanity, all through pixelated images and keyboard and mouse controls. These games seek first to express but are not necessarily "fun."

Other programmers seek to explore the nature of life, death, and love through videogames. One such game is *Passage* (2007), designed and programmed by Jason Rohrer. Rohrer made *Passage* after two significant events – his thirtieth birthday and the death of a close

neighbor. In an essay describing his intentions with the game, Rohrer calls *Passage* a "*memento mori* game" (Rohrer "What") or a game that encourages the player to consider her mortality. While death is a common part of many videogames, it is not a primary or serious theme. Players either strive to avoid their character's death or direct their character to kill endless armies of faceless goons. However, these videogame deaths are practically meaningless as enemies and main characters regenerate or resurrect upon death, and all that the player loses is some real-world time and in-game items. *Passage*, however, explores the nature of life and death through its two characters and two deaths, and it takes exactly five minutes to experience. It is an example of an art game, seeking to express ideas through mechanics that make games unique.

Passage has no stated goal, story, or instructions (other than the controls). The player controls a blond-haired male character and is free to move about the screen as she pleases. The further down the screen the character moves, the more maze-like the world becomes. Sometimes treasure chests appear and the player can choose to open or ignore them. Early in the game, the player encounters a female character he can join or ignore. Joining the woman pairs the two characters for the remainder of the game until the final seconds when death finally separates them. The game does have a score counter in the top right corner, but regardless of how large or small the number is at the end, the game always ends the same – in death.

The game offers no exposition and no context, and Rohrer even insists in his creative statement that individual interpretation should take precedence over his own thoughts - "**Please** play the game before you read this," he implores in the first sentence of his statement, avoiding spoilers for those who haven't played before and allowing people to approach the game in their own unique ways. *Passage* is not a game that has or needs a backstory. It simply provides the tools for the player to apply her own meaning and story to the experience.

Passage is an aesthetically unassuming game. The graphics are pixelated, blocky, and oftentimes blurry. The screen shows an extremely narrow playing field, and the edges of the screen are compressed and difficult to see clearly. The game controls are easy to learn – the player uses the arrow keys to move the character up, down, left, and right – but it is sometimes difficult to navigate the character through obstacles obscured by the narrow screen. The music is a simple, meandering electronic tune that repeats several times during the five-minute course of the game. In visual, musical, and literary terms, *Passage* is not a special game.

Screenshot from Jason Rohrer's Passage *– this is from the early part of the game when the main character is a young man. The character can move up or down in the game world in the areas obscured by the narrowly framed screen.*

While *Passage*'s controls and world may seem limited compared to multi button console controllers and interactive 3D environments, those limitations are actually a part of how Rohrer intended to convey his ideas. The narrow screen shows how people are usually only able to see a narrow slice of the wide world around them. The blocky, pixelated graphics force the player to focus on the function of the game rather than the form. The simple, blipping, repetitious tune provides an appropriate ambience for the game, but by using simple music, Rohrer could keep the file size of the game small enough to make it accessible to a wide audience. By stopping the game after five minutes of play, Rohrer unquestionably communicates the brevity of life and the suddenness of death.

The content of the game itself also contains meaning despite its simplicity. The treasure chests nestled within an increasingly difficult (and entirely optional) maze are the different endeavors that people pursue throughout their lives. Some chests give rewards, and others

contain nothing. Joining the female character, or spouse, increases the point score for each step the two take together, but she also makes navigating the maze and reaching some treasure chests more difficult and sometimes impossible. The top part of the screen is clear of obstacles, but it also contains no treasure chests – choosing that path makes the game easier, but it yields fewer rewards.

Rohrer illustrates the passage of time by a graphical representation of people's perspective of time and the physical effects of time on the human body. The narrow screen of the game world is a navigable environment, but it also is a sort of interactive timeline. At the beginning of the game, the main character is on the far left side of the screen, and the right side is fuzzy and difficult to see. The player can move the character in the four cardinal directions within the environment, but the player has no control over the character's main screen position. Gradually, the character shifts from left to right and the left side of the screen becomes hazier. The shift from left to right is the inevitable momentum of time propelling the characters forward toward death. The hazy edges of the screen represent the future and the past – in youth, the future is hazy and uncertain, and in old age, memories of the past can blur together and even be forgotten. All the time this movement happens, the character's physical appearance ages until he is an old man standing on the right side of the screen, his entire life behind him on the left.

Characters' age progression in Passage.

Inevitably, the characters die. However, the way Rohrer addresses this all-too-common element of videogames is uncommon. As the characters move closer to the right edge of the screen, they have visibly aged. The player is directing the two characters – if she chooses to join

with the spouse – when suddenly, without warning or foreseeable cause, the spouse disappears and a grave marks the last place she was standing. The main character hunches down into an even older man – the file name of that image is called "characterSpriteSad" – and moves much slower than when his spouse was alive. The spouse does not return, her grave stays exactly where it appeared, and a few seconds later, the main character's position is also marked by a grave as well. The title screen fades over the game and that's that. The final score has no impact on the ending, and the characters have no extra lives – it is an unequivocal "game over."

Grave marker in Passage.

Life, death, love, and the passage of time are common themes in literature, film, music, art – however, where *Passage* stands out is how it addresses those common themes through the medium of a game. Rohrer could not have created the same experience if he'd chosen another medium through which to express himself. The interactivity of the game allows the player to make choices and see how the consequences play out over the five-minute experience. The player could choose to ignore the spouse and spend the entire game combing the maze for treasure, accumulating points and eventually dying. Or, the player could join with the spouse and stay on the top, easy path, accumulating points and eventually dying. Once the player understands the meaning behind the game's mechanics, exploring those different choices suddenly translates into real-life scenarios and leads to introspection about one's own role in the passage of time. In five-minute clips, Jason Rohrer allows the player to explore the consequences of single-mindedly pursuing one's goals, finding love and devoting all one's attention to that person, floating aimlessly through life, or trying to strike a balance between compromising with a spouse and pursuing one's individual dreams. Of course, death comes to all at the end, and the score counter in the upper right corner disappears. The final score doesn't actually matter, but it

does remind the player that different choices lead to different outcomes. In fact, it can also remind the player that the same choices can lead to different outcomes.

Passage has garnered strong response from those in gaming culture because of its concision, depth, and meaning. Clint Hocking, a programmer who gave an impassioned speech at the 2008 Game Developers Conference, cited *Passage* as an example of "a game that matters... a game that made me cry... a game that means something." Hocking noted the irony that he, a programmer who works on big-budget, visually dense, and time-extensive games, was moved to tears by a clunky, pixelated game that is a scant 300 seconds long. While visual elements and large amounts of game content are not themselves bad, Hocking noted the danger that lies in focusing completely on the superficial aspects of games:

> Do you really think what moves people in *Lord of the Rings* is a dagger that glows when Orcs are near...No. What people give a shit about is that Frodo has to trust Sam to hold the other end of [the rope] and not drop him off a cliff and steal the Ring. The mechanics of trust are not more difficult to model than the mechanics of rope. Yet our games are still chock full of daggers and rings and cloaks and bows... What we lack is not creativity... We lack the courage to show that we care about real things...to risk ourselves for our art, and the reality is that is the ONLY difference between being the basically juvenile medium we are, and the mature medium we will inevitably become. (Hocking)

Hocking's talk at the conference sums up the general state of games as art – some games succeed as art, but programmers have much more they can do to make games further cross over the threshold into "art."

VI. Conclusion

Videogames artistically explore many avenues of expression. Visually, games cover a wide range of aesthetic elements, and narratively, games aspire to tell sweeping stories and explore character development. However, compared to books and movies, a disproportionally large number of games do not yet fit completely in the realm of art. While a game can artistically explore different aspects of life, the game itself is generally not considered art. That is not to say that games do not have the capability of establishing themselves as an artistic medium.

Because videogames now reach wider populations and have a mainstream audience, people may want more access to historic and older games. As seen with the University of Illinois' Gaming Initiative, libraries have started archiving and circulating console games and machines required to play some of them (see www.library.illinois.edu/gaming/about). While games are becoming widely available through the Internet, people may want to learn the origins of videogames and play games that are not available online or on modern consoles. Libraries preserve and disseminate information – including videogames – freely to the public. Whether videogames ever reach wide acceptance as an art form, they are undeniably an important cultural influence worthy of preservation in libraries.

In his book *Extra Lives,* Tom Bissel interviewed Jonathan Blow, a game programmer known for his award-winning *Braid* (2008) and encouraging experimental design in videogames. In the interview, Blow expressed frustration that game programmers were primarily seeking to copy existing media like film rather than truly exploring the expressive mechanics available in videogames, saying, "The game

developer's idea of a great story is copying an action story. Isn't it a little obvious that that's never going to go anywhere?" (Blow 91). Videogames still lack solid genre identity, as evidenced by the way many games seem to depend on emulating other media.

While many videogames do make statements, Blow expressed concern with the type of statements they were making. Blow stated that he enjoys certain elements of games not known for their artistic subtlety but countered that by saying, "I am against the entire industry making only that. When we only make that, what does that mean about us and our ability to approach subjects about humanity on the whole?" (Blow 102). Videogames as a whole are a stunted medium, but many programmers are trying to dissolve the negative stereotypes people have concerning the genre.

The Scratchware Manifesto, written by a collection of anonymous programmers, voices its own frustration at the constraints placed on videogame development by big studios. Budgets and videogame markets, the writers lament, stifle creativity. Contemporary games deliver what customers want by repeating financially successful formulas rather than challenging players with new and exciting ideas. This manifesto, originally released online in 2000, establishes the basic guidelines for what independent game developers envision as the ideal programming environment. Some independent programmers have created work environments that resemble these conditions – that is, individually managing game development on their own terms and rejecting the larger studios. The growth of this videogame culture allows greater opportunity for creativity, which means releasing more games that fit the "art games" category (*The Scratchware Manifesto*).

Videogames are in a transitional period. Through increased accessibility, games have reached mainstream culture and have an audience as varied as the world's population. Now,

games need to find a way to speak to that population. Some games have already presented interesting and insightful ideas to the world. Other games are learning to speak the language – they just need to figure out what to say. Videogames will establish their places in the art world, and in the meantime, players and programmers can enjoy watching this newborn medium develop in real time and participating in the evolution of videogames as art.

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